Master The Place Value of 3-Digit Numbers

Rationale

In this step, pupils will build on their understanding from Year 2 and recognise the place value of each digit in 3-digit numbers. They will use Dienes to look at the number as a whole and explain the value of the digits in the hundreds, tens and ones columns, recognising that columns with the digit '0' do not need to be described. Pupils will continue to use the same representation to look at the individual digits of given numbers and explain the value of a single digit in its place.

Pupils' learning will be developed with representations of given numbers in place value charts, applying their knowledge to recognise the value of specific digits abstractly.

Key Stem Sentences

- ___ has ___ hundreds, ___ tens and ___ ones.
- ___ has ___ hundreds / tens / ones. The value of the digit ___ is ___
- In ___, the value of the digit ___ is ___

Key Vocabulary

- ones / tens / hundreds
- digit / place holder
- place
- value

Key Representations

Dienes
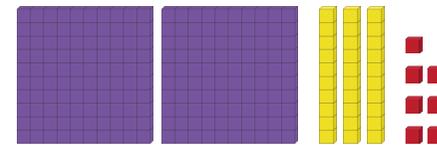
237 has 2 hundreds, 3 tens and 7 ones.
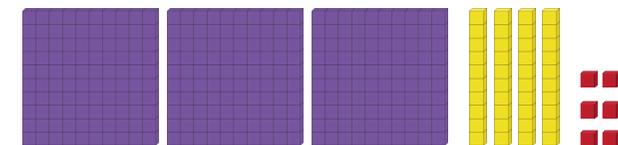
346 has 4 tens. The value of the digit 4 is 40

Place Value Charts with Digits

100s	10s	1s
5	1	9

In 519, the value of the digit 5 is 500

100s	10s	1s
8	0	3

In 803, the value of the digit 3 is 3

Common Errors or Misconceptions

- Pupils may misinterpret the value of a digit in its place. For example, in 391, the value of the digit 9 is 9
- Pupils may not recognise zero as a place holder.

Pupils will FLOURISH if they can...

- describe the place value of each digit in a 3-digit number.
- recognise zero as a place holder.
- identify the value of a single digit in its place.
- begin to explain their understanding using 'Decide, Assess, Back up', given stems and representations.